

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2020-3-E - ORDER NO. 2020-634

SEPTEMBER __, 2020

IN RE: Annual Review of Base Rates for
Fuel Costs of Duke Energy Carolinas,
LLC

)
) **JOINT PROPOSED ORDER**
) **APPROVING AND ADOPTING**
) **ADJUSTMENT IN FUEL COST**
) **RECOVERY FACTORS AND**
) **ADOPTING STIPULATION**

This matter comes before the Public Service Commission of South Carolina (“Commission”) on the annual review of base rates for fuel costs of Duke Energy Carolinas, LLC (“DEC” or “Company”). The procedure followed by the Commission is set forth in S.C. Code Ann. § 58-27-865, which provides for annual hearings to allow the Commission and all interested parties to review the prudence of the fuel purchasing practices and policies of an electrical utility and for the Commission to determine if any adjustment in a utility’s fuel cost recovery mechanism is necessary and reasonable. Additionally, pursuant to S.C. Code Ann. § 58-39-140, the Commission must determine whether to increase or decrease the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the Distributed Energy Resource Program (“DERP”) previously approved by the Commission.

I. PROCEDURAL HISTORY

By letter dated March 10, 2020 the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Pre-file Testimony Deadlines ("Notice") in newspapers of general circulation by May 22, 2020, and to provide Proof of Publication by June 15, 2020. The letter also instructed the Company to furnish the Notice to each affected customer

on or before May 22, 2020, and provide a certification to the Commission that the Notice had been furnished by June 15, 2020. The Notice indicated the nature of the proceeding and advised all interested parties of how to participate in this proceeding and of important deadlines. On May 22, 2020, the Company filed with the Commission an affidavit of publication of the Notice and filed affidavits that the Notice had been timely furnished to all customers.

The Commission received petitions to intervene from the South Carolina Coastal Conservation League (“CCL”), the Southern Alliance for Clean Energy (“SACE”), and the South Carolina Energy Users Committee (“SCEUC”), which were granted.¹ The South Carolina Office of Regulatory Staff (“ORS”) is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B).

II. STIPULATION

On September 3, 2019, after the pre-filing of direct testimony by the parties, and after all parties had conducted discovery in this matter, ORS filed with the Commission a Stipulation (“Stipulation”) executed by DEC, ORS, and SCEUC (collectively, referred to as the “Stipulating Parties” or sometimes individually as a “Stipulating Party”). In the Stipulation, the Stipulating Parties represented to the Commission that they had discussed the issues presented in this case and determined that each Stipulating Party’s interests and the public interest would be best served by resolving all of the Stipulating Parties’ issues pending in this case in accordance with the terms and conditions contained in the Stipulation. The Stipulation is attached hereto as **Order Exhibit 1** and is incorporated in and made part of this Order. The terms of the Stipulation are summarized as follows:

¹ Order Nos. 2020-427 and 2020-475.

- a) The Stipulating Parties agree that, without prejudice to the position of any Party in future proceedings, the Stipulating Parties accept all recommendations and adjustments in the testimony and exhibits of ORS witnesses.
- b) The testimony supported the terms of the Stipulation regarding the appropriate fuel factors for DEC to charge for the period beginning with service rendered in October 2020 and extending through service rendered in September 2021, which are listed in the following table below:

Customer Class	Base Fuel Cost Component (¢/kWh)	Environmental Cost Component (¢/kWh)	Capacity Related Cost Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Total Fuel Factor (¢/kWh)
Residential	1.5025	0.0207	0.0836	0.0034	1.6102
General Service/ Lighting	1.5025	0.0278	0.0910	0.0033	1.6246
Industrial	1.5025	0.0204	0.0657	0.0024	1.5910

- c) The Stipulating Parties agree for purposes of Stipulation and without prejudice to the position of any Party in any future proceeding that the 2019 component values for the Net Energy Metering (“NEM”) Distributed Energy Resource, as shown in Table 5 in the testimony of DEC witness Jason D. Martin and listed below comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.*

Components of NEM Distributed Energy Resource Value	Component value (\$/kWh) Residential PV²	Component value (\$/kWh) SGS PV¹	Component value (\$/kWh) Large PV¹
Avoided Energy Cost	\$0.02911	\$0.02915	\$0.02914
Avoided Capacity Cost	\$0.000000	\$0.000000	\$0.000000
Ancillary Services	(\$0.001100)	(\$0.001100)	(\$0.001100)
T&D Capacity	\$0.000000	\$0.000000	\$0.000000
Avoided Criteria Pollutants ³	\$0.000005	\$0.000005	\$0.000004
Avoided CO2 Emissions Cost	\$0.000000	\$0.000000	\$0.000000
Fuel Hedge ⁴	\$0.000000	\$0.000000	\$0.000000
Utility Integration & Interconnection Cost	\$0.000000	\$0.000000	\$0.000000
Utility Administrative Cost	\$0.000000	\$0.000000	\$0.000000
Environmental Costs	\$0.000000	\$0.000000	\$0.000000
Subtotal	\$0.02806	\$0.02809	\$0.02809
Line Losses ⁵	\$0.00062	\$0.00062	\$0.00062
Total Value of NEM Distributed Energy	\$0.02868	\$0.02871	\$0.02871

- d) The Stipulating Parties agree that the appropriate fixed charges per account, including Gross Receipts Tax and regulatory fees, to recover DERP incremental costs (“DERP Charge”) for the period beginning with service rendered from October 2020 through September 2021 are listed below.

² “Residential PV” refers to a load shape reflecting generation installed by a residential customer. “SGS PV” refers to a load shape reflecting generation installed by a small commercial/industrial customer served under Small General Service Schedule SGS. “Large PV” refers to a load shape reflecting generation installed by a customer with higher consumption requirements and applies to all other nonresidential schedules. For the first time, the Company has separated the values for residential customers (“Residential PV”) and small commercial/industrial customers (“SGS PV”) as a result of available actual metered solar load profile data for the residential class. The Company continues to utilize third-party solar load profile data for non-residential customers.

³ Avoided Criteria Pollutants reflects NOx and SOx that have been separately identified from approved marginal energy costs.

⁴ Pursuant to the Settlement Agreement reached in DEC’s 2016 annual fuel proceeding (Docket No. 2016-3-E), the Company has calculated the hedge value and determined that no fuel hedge exists; therefore, the value is zero.

⁵ Line loss factors are 2.332% for on-peak marginal energy, 4.433% for off-peak marginal energy and 1.874% for marginal capacity per DEC’s updated 2018 line loss analysis based upon 2018 cost of service.

DERP Charge ⁶ (\$/account)		
Customer Class	Annual Charge	Monthly Charge
Residential	7.66	0.64
Commercial	35.02	2.92
Industrial	1,200.00	100.00

- e) The Stipulating Parties agree that, except as noted herein, any challenges to DEC's historical fuel costs recovery for the period ending May 31, 2020, are not subject to further review; however, with regard to plant outages not complete as of May 31, 2020, and plant outages where final reports or investigations (Company, contractor, government reports or otherwise) are not available, the Stipulating Parties agree that they retain the right to review the reasonableness of plant outage(s) and associated costs in the review period during which the outage is completed or when the report(s) become available.
- f) DEC agrees that in an effort to keep the Stipulating Parties and DEC's customers informed of the (over)/under recovery balances related to fuel costs, DEC's DERP incremental costs, and of DEC's commercially reasonable efforts to forecast the expected fuel factor to be set at its next annual fuel proceeding, DEC will provide to the Stipulating Parties, and where applicable, its other customers, the following information:
1. copies of the monthly fuel recovery reports currently filed with the Commission and ORS showing the monthly (over)/under-recovery and cumulative balances through the end of the forecast period;⁷
 2. copies of the monthly fuel recovery reports currently filed with the Commission, modified to include reports of itemized monthly actual DERP

⁶ Gross Receipts Tax is included.

⁷ The Company agrees to break-out Schedule 4 of the monthly fuel recovery reports so that each component (base fuel, environmental, avoided capacity, and DER avoided costs) is reported separately.

incremental and avoided costs as well as the monthly over/under cumulative balances of DERP avoided and incremental costs;

3. forecasts of the expected fuel factor to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of prices for uranium, natural gas, coal, oil and other fuel required for generation of electricity. Such forecasts will be provided in the 4th quarter of the calendar year prior to the next annual fuel proceeding and in the 2nd quarter of the calendar year of the Company's next annual fuel proceeding. DEC will use commercially reasonable efforts in making these forecasts. To the extent that the forecast data required hereunder is confidential, any party or customer, other than ORS, that requests forecasted fuel data will have to sign a non-disclosure agreement agreeing to protect the data from public disclosure and to only disclose it to employees or agents with a need to be aware of this information; and,
4. forecasts of the expected DERP Charge to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of DERP incremental and avoided costs. Forecasts will be provided in the same manner as f.3. above.

- g) The Stipulating Parties agree that DEC's methodology for determining the environmental cost component of the fuel factor and the methodology for allocation and recovery of the capacity-related cost component of the fuel factor (which includes purchased power capacity costs under the Public Utility Regulatory Policies Act of 1978 ("PURPA")) and

natural gas transportation and storage costs) are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865.

- h) DEC agrees to continue to examine and make adjustments, as necessary, to its natural gas hedging program in light of the potentially reduced volatility in the domestic natural gas market. DEC also agrees to provide monthly natural gas hedging reports to the ORS.

III. JURISDICTION OF THE COMMISSION

In accordance with S.C. Code Ann. § 58-27-140(1), the Commission may, upon petition, “ascertain and fix just and reasonable standards, classifications, regulations, practices or service to be furnished, imposed, observed, and followed by any or all electrical utilities.” Further, S.C. Code Ann. § 58-27-865(B) states, in pertinent part, that “[u]pon conducting public hearings in accordance with law, the commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs determined by the commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period.”

Consistent with the requirements of S.C. Code Ann. § 58-27-865(B), the Commission convened an evidentiary hearing to determine the reasonableness of the Company’s proposed rates to recover fuel costs.

IV. DISCUSSION OF THE HEARING

The public evidentiary hearing was held virtually on September 10, 2020, before the Commission with the Honorable Justin T. Williams presiding. Representing the Parties and appearing before the Commission in this Docket were Samuel J. Wellborn, Esquire, and Katie M. Brown, Esquire, for the Company; J. Blanding Holman, IV, Esquire, Kurt D. Ebersbach, Esquire, and Katherine N. Lee, Esquire, for SACE/CCL; Scott Elliott, Esquire, for SCEUC; and

Christopher M. Huber, Esquire, and Andrew M. Bateman, Esquire, for ORS. The Company and ORS presented witnesses regarding the Company's base rates for fuel costs. No other parties filed testimony. At the outset of the hearing, ORS moved the Stipulation entered between ORS, the Company, and SCEUC into the record as the first hearing exhibit. SACE/CCL did not sign the Stipulation but filed a letter with the Commission on September 4, 2020, stating they do not object to it.

A. Company Testimony

The Company presented the direct testimonies of Steven D. Capps, Kenneth D. Church, Steve Immel, Jason D. Martin, and John A. Verderame, and the amended direct testimony of Kimberly D. McGee. The pre-filed testimony of all Company witnesses offered into the record was accepted into the record without objection. The exhibits to the Company's pre-filed testimony that were offered into the record were accepted without objection, marked as Hearing Exhibits 2 through 4 and 6 through 8, and entered into the record.⁸

Company witness Church testified regarding the Company's nuclear fuel purchasing practices, provided costs for the period of June 1, 2019 through May 31, 2020 ("Review Period"), and described changes forthcoming for the period October 1, 2020 through September 30, 2021 ("Billing Period").

Company witness Verderame testified regarding the Company's fossil fuel purchasing practices, provided actual fuel purchasing costs for the Review Period and the prior review period

⁸ Hearing Exhibit 2 consists of the two exhibits DEC witness Verderame provided with his prefiled direct testimony; Hearing Exhibit 3 consists of two exhibits DEC witness Capps provided with his prefiled direct testimony labeled Capps Exhibit 1 and 2; Hearing Exhibit 4 consists of the confidential and public versions of Exhibit 3 to Capps' prefiled direct testimony; Hearing Exhibit 6 consists of the two exhibits DEC witness Church provided with his prefiled direct testimony; Hearing Exhibit 7 consists of the one exhibit to DEC witness Martin's prefiled direct testimony; and Hearing Exhibit 8 consists of the 13 exhibits DEC witness McGee provided with her prefiled amended direct testimony.

of June 1, 2018 through May 31, 2019, and described related changes forthcoming in the Billing Period relating to trends in market conditions and projected fossil fuel consumption and costs. At the hearing, in response to Commissioner questions, Mr. Verderame provided testimony supporting the reasonableness and prudence of the Company's decision to buy out of certain coal contract obligations during the Review Period.

Company witness Immel testified regarding the Company's fossil/hydro/solar generation portfolio and changes made since the prior year's filing, changes expected in the near term, and the performance of the Company's fossil/hydro/solar generation facilities during the Review Period. Witness Immel also provided information on significant fossil/hydro/solar outages that occurred during the Review Period and provided information concerning environmental compliance efforts.

Company witness Capps discussed the performance of the Company's nuclear generation fleet during the Review Period.⁹ Witness Capps reported to the Commission that the Company achieved a net nuclear capacity factor, excluding reasonable outage time, of 101.24% for the Review Period, which exceeds the 92.5% set forth in S.C. Code Ann. § 58-27-865.

Company witness Martin testified regarding DERP costs that are incorporated into the proposed fuel factors by Company witness McGee. Company witness Martin also provided information on the nature of the costs filed as well as any changes made to the DERP portfolio since the previous fuel proceeding. Additionally, Company witness Martin sponsored the

⁹ Pursuant to the Company's request, Commission Order No. 2020-530 ordered that Exhibit 3 of Company witness Capps' testimony be treated as confidential. The confidential and public versions of Capps' Exhibit 3 were entered into evidence as Hearing Exhibit 4.

Company's revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet, filed as Martin Exhibit 1.

Company witness McGee's direct testimony addressed the Company's actual fuel, capacity-related costs, including PURPA capacity, environmental, and DERP cost data for the Review Period, the estimated fuel, capacity-related costs, environmental, and DERP cost information for June 1, 2020 through September 30, 2020, and the Company's proposed fuel factors by customer class for the Billing Period. Company witness McGee testified that the environmental cost component allocations were consistent with Order No. 2007-674, that the capacity component was allocated in accordance with Order No. 2014-787, and that all fuel rate components were allocated in accordance with Act 236.

Company witness McGee provided thirteen (13) exhibits to support her amended direct testimony. The rates and monthly charges proposed by the Company in this proceeding are reflected on McGee Exhibit No. 1. Company witness McGee discussed the Company's approved DERP, associated costs and the DERP NEM Incentive. Witness McGee testified that the Company seeks approval for the monthly DERP incremental costs amounting to a per-account monthly charge ("DERP Charge") of \$0.64, \$2.92, and \$100.00 for South Carolina residential, commercial, and industrial customers, respectively, including Gross Receipts Tax.

Company witness McGee stated that the anticipated impact of all components of the Company's filing and of the Stipulation for the average general service, lighting, and industrial customer is a decrease of 5.6 percent, 3.1 percent, and 9.8 percent, respectively.

The Commission requested a late filed exhibit from the Company regarding the prudence of the coal contract buyouts described in DEC witness Verderame's Direct Testimony. The

Company filed this exhibit on September 11, 2020, as Late-Filed Exhibit No. 5 of Duke Energy Carolinas, LLC.

B. ORS Testimony

Following the presentation of the Company's witnesses, ORS presented the direct testimonies of Anthony D. Briseno, Brandon S. Bickley, Anthony M. Sandonato, and Robert A. Lawyer. The pre-filed direct testimony of all ORS witnesses was accepted into the record without objection and the ORS witnesses' exhibits were marked as Hearing Exhibits 9 through 12 and were entered into the record of the case.¹⁰

ORS witness Briseno presented direct testimony and ten (10) exhibits, which demonstrated the results of ORS's examination of the Company's books and records pertaining to operations under the Fuel Adjustment Clause for the Review Period. Witness Briseno testified that based on ORS's examination, ORS agrees with the balances and the adjustments as put forth by the Company as of the end of the Review Period. ORS agrees with the following cumulative (over)/under-recovery balances as calculated by the Company:

- May 2020 base fuel cost under-recovery balance of \$8,256,489;
- May 2020 environmental cost component over-recovery balance of \$1,044,761;
- May 2020 capacity cost component over-recovery balance of \$1,748,011;
- May 2020 DERP incremental over-recovery balance of \$2,906,930;
- May 2020 DERP avoided cost over-recovery balance of \$117,601;
- September 2020 estimated base fuel cost over-recovery balance of \$18,869,974;

¹⁰ Hearing Exhibit 9 consists of the ten exhibits ORS witness Briseno provided with his prefled direct testimony; Hearing Exhibit 10 consists of the six exhibits ORS witness Bickley provided with his prefled direct testimony; Hearing Exhibit 11 consists of the five exhibits ORS witness Sandonato provided with his prefled direct testimony; and Hearing Exhibit 12 consists of the one exhibit to ORS witness Lawyer's prefled direct testimony.

- September 2020 estimated environmental cost component over-recovery balance of \$1,249,555;
- September 2020 estimated capacity cost component under-recovery balance of \$408,492;
- September 2020 estimated DERP incremental cost over-recovery balance of \$2,704,183; and
- September 2020 estimated DERP avoided cost over-recovery balance of \$121,072.

ORS witness Bickley presented direct testimony and six (6) exhibits. Witness Bickley testified regarding ORS's examination of the Company's power plant operations and to nuclear, fossil and hydro generation performance, generation mix, plant dispatch, and forecasted power plant operations.

ORS witness Sandonato presented direct testimony and five (5) exhibits. Witness Sandonato testified regarding the Company's fuel expenses and ORS's examination relating to the Company's fuel expenses, fossil and nuclear fuel procurement, fuel transportation, environmental compliance-related costs, purchased power and the Company's policies and procedures. Witness Sandonato also testified regarding ORS's review of the Company's forecasted fuel-related costs and sales. Witness Sandonato testified that should the Commission approve the Stipulation, the average monthly bill for a residential customer on Rate RS using 1,000 kWh would decrease by approximately \$6.77, or 5.54 percent. At the hearing, in response to Commissioner questions, Mr. Sandonato testified the Company's decision to buy out of certain coal contract obligations during the Review Period complied with the requirements of S.C. Code Ann. 58-27-865(F) that the Company make every reasonable effort to minimize fuel costs.

ORS witness Lawyer presented direct testimony and one (1) exhibit. Witness Lawyer testified regarding the ORS's recommendations resulting from the examination of the Company's

DERP expenses for June 2019 through September 2021. Specifically, witness Lawyer testified regarding the Company's DERP avoided and incremental costs, the method by which the Company proposed to recover those costs, the Company's calculation of the NEM incentive, and the Company's modification to the Renewable Net Metering Rider. ORS found the Company's DERP avoided and incremental costs to be reasonably and prudently incurred in implementing the Company's DERP and the Company's estimated and forecasted DERP avoided and incremental costs to be reasonable. ORS found the Company's calculation of the proposed DERP Charge and of the under-collected incremental costs complied with Act 236 and the Commission's orders in previous DERP-related proceedings. Exhibit RAL-1 reflects the under-recovered and total estimated forecasted incremental costs.

V. FINDINGS OF FACT AND CONCLUSIONS OF LAW

Having heard the testimony of the witnesses and representations of counsel and after careful review of the Stipulation and record, the Commission finds that approval of the terms of the Stipulation are consistent with the standards for fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865, and is supported by the substantial evidence in the record. The rates and monthly charges proposed in the Stipulation are calculated to allow recovery in a precise and prompt manner while assuring public confidence and minimizing abrupt changes in charges to customers. As such, approval of these rates and monthly charges is in the public interest in this case. The Commission further finds that the Stipulation's proposed rates and monthly charges provide stabilization to the fuel factors, minimize fluctuations for the near future, and do not appear to inhibit economic development in South Carolina. Additionally, the Commission finds and concludes that the Stipulation affords the Parties the opportunity to review costs and operational data in succeeding fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865.

The Commission finds that the methodology for determining the environmental cost component of the fuel factors and the methodology for allocation and recovery of the avoided capacity component used by the Company in this proceeding are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865 and are just and reasonable.

The Commission finds that the fuel factors as calculated in McGee Exhibit 1 are lawful, just, and reasonable.

The Commission finds that the 2020 component values for the NEM Distributed Energy Resource, as shown in Table 5 in the testimony of Company witness Martin, comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. §§ 58-40-10 *et seq.*

The Commission finds that the revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet reflected in Martin Exhibit 1 are lawful, just, and reasonable.

The Company's calculation and method of accounting for DERP avoided and incremental costs during the Review Period were reasonable and prudent, and were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. §§ 58-40-10 *et seq.*

The Commission finds that the revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet reflected in Martin Exhibit 1 are lawful, just and reasonable.

The Commission finds that the DERP Charges as indicated in the Stipulation are reasonable and comply with S.C. Code Ann. §§ 58-27-865, 58-39-140 and 58-39-150.

The Commission finds that the estimated base fuel cost over-recovery balance of \$18,869,974 as of September 2020 is lawful, just, and reasonable and supported by the reliable, probative, and substantial evidence of record.

IT IS THEREFORE ORDERED THAT:

1. The Stipulation, the pre-filed testimonies of ORS witnesses Anthony D. Briseno, Brandon S. Bickley, Anthony M. Sandonato, and Robert A. Lawyer and the pre-filed testimonies of Company witnesses Steven D. Capps, Kenneth D. Church, Steve Immel, Jason D. Martin, John A. Verderame, and Kimberly D. McGee, along with their respective exhibits entered into evidence as Hearing Exhibits 1 through 4 and 6 through 12, are accepted into the record. The oral testimony of these witnesses provided at the hearing on September 10, 2020, is also incorporated into the record of this case.

2. The fuel purchasing practices and policies, plant operations, and fuel inventory management of DEC related to the historical fuel costs and revenues for the period ending May 31, 2020, are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865 (2015), and are just, reasonable, and prudent.

3. The methodologies used by the Company for determining the environmental cost component and the capacity-related cost component of the fuel factor are consistent with the requirements of S.C. Code Ann. § 58-27-865 (Supp. 2015) and are reasonable and prudent for the review period and the billing period.

4. The Stipulation is incorporated into this present Order by reference and attachment as **Order Exhibit 1** and is found to be a reasonable resolution of the issues in this case and to be in the public interest, and is hereby adopted and approved.

5. The methodologies used by the Company to calculate its avoided energy and capacity costs under PURPA for the Review Period and Billing Period are reasonable and prudent.

6. The Company's revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet, attached hereto as **Order Exhibit 2**, are lawful, just and reasonable, and shall become effective for service rendered during the Billing Period.

7. The Company's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, and were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. §§ 58-40-10 *et seq.*

8. The 2020 component values for NEM Distributed Energy Resource comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. §§ 58-40-10 *et seq.*

9. The Company shall set its base fuel factor for all customer classes at 1.5025 cents per kWh, not including applicable environmental, capacity-related, and DERP avoided cost components.¹¹ DEC's total fuel factors shall be set at 1.6102 cents per kWh for the Residential class, 1.6246 cents per kWh for General Service and Lighting Classes, and 1.5910 cents per kWh for the Industrial Class.

10. The Company shall set its environmental component billing factor at 0.0207 cents per kWh for the Residential class, 0.0278 cents per kWh for the General Service/Lighting class, and .0204 cents per kWh for the Industrial class for service rendered during the Billing Period.

11. The Company shall set its capacity-related component at 0.0836 cents per kWh for the Residential class, 0.0910 cents per kWh for the General Service/Lighting class, and .0657 cents per kWh for the Industrial class for service rendered during the Billing Period.

¹¹ The base fuel factors, environmental component billing factor, avoided capacity component, and DERP avoided cost component do not include Gross Receipt Tax and regulatory fees.

12. The Company shall set its DERP avoided cost component at 0.0034 cents per kWh for the Residential class, 0.0033 cents per kWh for the General Service/Lighting class, and .0024 cents per kWh for the Industrial class for service rendered during the Billing Period.

13. The Company shall set its DERP Charge at \$.64/month for the Residential class, \$2.92/month for the Commercial class, and \$100.00/month for the Industrial class, including Gross Receipts Tax and regulatory fees.

14. The Company shall file the South Carolina Retail Adjustment for Fuel, Variable Environmental, and Avoided Capacity Costs Rider and all other retail Tariffs with the Commission and a copy with ORS within ten (10) days of receipt of this Order.

15. The Company shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865.

16. The Company shall continue to utilize the methodology for developing the environmental component billing factor for each rate class to recover “variable environmental costs” under S.C. Code Ann. § 58-27-865(A)(1) approved in Order No. 2007-440. Pursuant to S.C. Code § 58-27-865(A)(1), the avoided capacity component of purchased power costs and other capacity costs that are permitted to be recovered through the fuel factor, are to be allocated and recovered from customers under a separate capacity component of the overall fuel factor based on the same method that is used by the utility to allocate and recover variable environmental costs.

17. The Company shall continue to file the monthly reports as previously required and record its natural gas utilizations on an hourly and daily basis as previously ordered.

18. The Company shall continue to examine and make adjustments as necessary to its natural gas hedging program in light of the potentially reduced volatility in the domestic natural gas market. The Company shall also provide monthly natural gas hedging reports to ORS.

19. The Company shall, by rate class, account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit.

20. The Company shall submit monthly reports to the Commission and ORS of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater.

21. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Justin T. Williams, Chairman

ATTEST:

Florence P. Belser, Vice-Chairman

(SEAL)

IN RE: Annual Review of Base Rates for Fuel)
Costs of Duke Energy Carolinas, LLC,) **STIPULATION**
Increasing Residential and Non-)
Residential Rates)

WHEREAS, following these discussions the Stipulating Parties have each determined that their interests and the public interest would be best served by stipulating the below issues in the above-captioned case under the terms and conditions set forth below:

A. STIPULATION OF TESTIMONY AND WAIVER OF CROSS-EXAMINATION

A.1 The Stipulating Parties agree to stipulate into the record before the Commission the pre-filed direct testimony and exhibits of ORS witnesses Anthony D. Briseno, Robert A. Lawyer, Brandon S. Bickley, and Anthony M. Sandomato, without objection or cross-examination. The Stipulating Parties also agree to stipulate into the record before the Commission, without objection or cross-examination, the direct testimony and exhibits of DEC witnesses Steve Immel, Steven D. Capps (including Confidential Exhibit No. 3), Jason D. Martin, John A. Verderame, and Kenneth D. Church and the amended direct testimony and exhibits of DEC witness Kimberly D. McGee.

A.2 The Stipulating Parties reserve the right to engage in re-direct of witnesses as may be necessary to respond to issues raised by the examination of their witnesses by non-signatories to this Stipulation.

A.3 The Stipulating Parties agree that no other evidence will be offered in the proceeding by the Stipulating Parties other than the stipulated testimony and exhibits and this Stipulation with the exception of changes comparable to that which would be presented via an errata sheet or through a witness noting a correction or clarification or by a witness adopting the testimony of another if permitted by the Commission or to answer a question posed by a non-signatory to this Stipulation.

B. STIPULATION TERMS

B.1 The Stipulating Parties agree to the proposal set out immediately below, and this proposal is hereby adopted, accepted, and acknowledged as the stipulation of the Stipulating Parties.

B.2 Without prejudice to the position of any Stipulating Party in future proceedings, the Stipulating Parties agree to accept all recommendations and adjustments in the testimony and exhibits of ORS witnesses.

Avoided and Incremental Costs, Net Energy Metering and Distributed Energy Resources

B.3 The Stipulating Parties agree for purposes of this stipulation and without prejudice to the position of any Stipulating Party in any future proceeding that the 2020 component values for the Net Energy Metering (“NEM”) Distributed Energy Resources, as shown in Table 5 in the testimony of DEC witness Martin and listed below comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. § 58-40-10, *et seq.*

Components of NEM Distributed Energy Resource Value	Component value (\$/kWh) Residential PV¹	Component value (\$/kWh) SGS PV¹	Component value (\$/kWh) Large PV¹
Avoided Energy Cost	\$0.02911	\$0.02915	\$0.02914
Avoided Capacity Cost	\$0.000000	\$0.000000	\$0.000000
Ancillary Services	(\$0.001100)	(\$0.001100)	(\$0.001100)
T&D Capacity	\$0.000000	\$0.000000	\$0.000000
Avoided Criteria Pollutants ²	\$0.00005	\$0.00005	\$0.00004
Avoided CO2 Emissions Cost	\$0.000000	\$0.000000	\$0.000000
Fuel Hedge ³	\$0.000000	\$0.000000	\$0.000000
Utility Integration & Interconnection Cost	\$0.000000	\$0.000000	\$0.000000
Utility Administrative Cost	\$0.000000	\$0.000000	\$0.000000
Environmental Costs	\$0.000000	\$0.000000	\$0.000000
Subtotal	\$0.02806	\$0.02809	\$0.02809

¹ “Residential PV” refers to a load shape reflecting generation installed by a residential customer. “SGS PV” refers to a load shape reflecting generation installed by a small commercial/industrial customer served under Small General Service Schedule SGS. “Large PV” refers to a load shape reflecting generation installed by a customer with higher consumption requirements and applies to all other nonresidential schedules. For the first time, the Company has separated the values for residential customers (“Residential PV”) and small commercial/industrial customers (“SGS PV”) as a result of available actual metered solar load profile data for the residential class. The Company continues to utilize third-party solar load profile data for non-residential customers.

² Avoided Criteria Pollutants reflects NOx and SOx that have been separately identified from approved marginal energy costs.

³ Pursuant to the Settlement Agreement reached in DEC’s 2016 annual fuel proceeding (Docket No. 2016-3-E), the Company has calculated the hedge value and determined that no fuel hedge exists; therefore, the value is zero.

Line Losses ⁴	\$0.00062	\$0.00062	\$0.00062
Total Value of NEM Distributed Energy	\$0.02868	\$0.02871	\$0.02871

B.4 Distributed Energy Resource Program (“DERP”) incremental costs are required by Act 236 to be allocated and recovered based on the same method used by the utility to allocate and recover variable environmental costs and under a separate DERP component of the overall fuel factor. Therefore, ORS analyzed the actual and estimated DERP incremental costs that DEC incurred for the actual period of June 2019 through May 2020, the estimated costs for the period June 2020 through September 2020, and the forecasted costs for the period October 2020 through September 2021. The Stipulating Parties agree with the adjustments made by the Company to the DERP component and agree with the ending cumulative balances of DERP incremental costs for May 2020 as an over-recovered \$2,906,930, and September 2020 as an over-recovered \$2,704,183, as calculated by the Company. The Stipulating Parties agree that the appropriate fixed charges per account, including gross receipts tax and regulatory fees, to recover DERP incremental costs (the “DERP Charge”) for the period beginning with service rendered from October 2020 through September 2021 are listed below.

DERP Charge ⁵ (\$/account)		
	Annual Charge	Monthly Charge
Residential	7.66	0.64
Commercial	35.02	2.92
Industrial	1,200.00	100.00

B.5 The Stipulating Parties agree that the DERP Charges as set forth above are consistent with S.C. Code Ann. §§ 58-27-865, 58-39-140 and 58-39-150 and with Commission orders.

⁴ Line loss factors are 2.332% for on-peak marginal energy, 4.433% for off-peak marginal energy and 1.874% for marginal capacity per DEC's updated 2018 line loss analysis based upon 2018 cost of service.

⁵ Gross Receipts Tax is included.

B.6 The Stipulating Parties agree that current under-collected DERP incremental costs will be treated in the same manner as other fuel and fuel-related under-collected balances are treated and any under-collection resulting from the annual cost caps mandated by Act 236 will be reallocated using each class's contribution to peak demand. The Stipulating Parties agree that in an effort to keep the Stipulating Parties and DEC's customers informed of the (over)/under-recovery balances related to DERP incremental costs, DEC will provide to ORS and, where requested, its customers, forecasts of the expected DERP Charge to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of DERP incremental and avoided costs. Forecasts will be provided in the same manner as forecasts of the expected fuel factor.

B.7 DERP avoided costs are required by Act 236 to be allocated and recovered based on the same method used by the utility to allocate and recover variable environmental costs and under a separate DERP component of the overall fuel factor. Therefore, ORS analyzed the DERP avoided costs that DEC reported and projected for the actual period of June 2019 through May 2020, the estimated costs for the period of June 2020 through September 2020, and the forecasted costs for the period October 2020 through September 2021 and found them to be reasonable. The Stipulating Parties agree with the adjustments made by the Company to the DERP avoided costs component and agree with the ending cumulative balances of DERP avoided costs for May 2020 as an over-recovered \$ 117,601, and September 2020 as an over-recovered \$ 121,072, as calculated by the Company.

Fuel Expenses and Power Plant Operations

B.8 The Stipulating Parties agree with the adjustments made by the Company to the base fuel component and agree with the ending cumulative balances of base fuel for May 2020 as

an under-recovered \$8,256,489, and September 2020 as an over-recovered \$18,869,974 as calculated by the Company.

B.9 The Stipulating Parties agree with the ending cumulative balances of environmental cost for May 2020 as an over-recovered \$1,044,761, and September 2020 as an over-recovered \$1,249,555, as calculated by the Company.

B.10 ORS also analyzed DEC's calculation of the projected cumulative capacity-related cost and agree with the ending cumulative balances of capacity costs for May 2020 as an over-recovered \$1,748,011, and September 2020 as an under-recovered \$408,492, as calculated by the Company.

B.11 ORS thoroughly reviewed and investigated DEC's nuclear operations during the review period. As shown in ORS witness Bickley's Exhibit BSB-1, DEC's nuclear fleet achieved an average net capacity factor during the actual period of 95.10%. DEC achieved this capacity factor notwithstanding the fact that it experienced five (5) scheduled refueling outages and one (1) forced outage during the actual period. S.C. Code Ann. § 58-27-865 states that:

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation facility or system, as applicable, if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review. The calculation of the net capacity factor shall exclude reasonable outage time associated with reasonable refueling, reasonable maintenance, reasonable repair, and reasonable equipment replacement outages; the reasonable reduced power generation experienced by nuclear units as they approach a refueling outage; the reasonable reduced power generation experienced by nuclear units associated with bringing a unit back to full power after an outage; Nuclear Regulatory Commission required testing outages unless due to the unreasonable acts of the utility; outages found by the commission not to be within the reasonable control of the utility; and acts of God. The calculation also shall exclude reasonable reduced power operations resulting from the demand for electricity being less than the full power output of the utility's nuclear generation system.

Excluding all reasonable outage time pursuant to S.C. Code Ann. § 58-27-865(F), DEC's net capacity factor for the review period was 101.24% as reflected in DEC witness Capps Exhibit 1.

B.12 The Stipulating Parties further agree that, except as noted herein, any challenges to DEC's historical fuel cost recovery for the period ending May 31, 2020, are not subject to further review; however, the projected fuel costs for periods beginning June 1, 2020, and thereafter shall be open issues in future fuel cost proceedings held under the procedure and criteria established in S.C. Code Ann. § 58-27-865.

Fuel Factors

B.13 The appropriate fuel factors for DEC to charge for the period beginning with service rendered in October 2020 and extending through service rendered in September 2021 are listed below. These fuel factors include the South Carolina base fuel costs, environmental costs, avoided capacity and the DERP avoided cost, but do not include gross receipt tax and regulatory fees. The Stipulating Parties agree that the fuel factors will be adjusted for billing purposes to include those amounts:

Customer Class	Base Fuel Cost Component (¢/kWh)	Environmental Cost Component (¢/kWh)	Capacity Related Cost Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Total Fuel Factor (¢/kWh)
Residential	1.5025	0.0207	0.0836	0.0034	1.6102
General Service/ Lighting	1.5025	0.0278	0.0910	0.0033	1.6246
Industrial	1.5025	0.0204	0.0657	0.0024	1.5910

B.14 The Stipulating Parties agree that the fuel factors set forth above are consistent with S.C. Code Ann. § 58-27-865.

Other

B.15 The Stipulating Parties agree that, except as noted herein, any challenges to DEC's historical fuel costs recovery for the period ending May 31, 2020, are not subject to further review; however, with regard to plant outages not complete as of May 31, 2020, and plant outages where final reports or investigations (Company, contractor, government reports or otherwise) are not available, the Stipulating Parties agree that they retain the right to review the reasonableness of plant outage(s) and associated costs in the review period during which the outage is completed or when the report(s) become available.

B.16 DEC agrees that in an effort to keep the Stipulating Parties and DEC's customers informed of the (over)/under recovery balances related to fuel costs, DEC's DERP incremental costs, and of DEC's commercially reasonable efforts to forecast the expected fuel factor to be set at its next annual fuel proceeding, DEC will provide to the Stipulating Parties, and where applicable, its other customers, the following information:

- a. copies of the monthly fuel recovery reports currently filed with the Commission and ORS showing the monthly (over)/under-recovery and cumulative balances through the end of the forecast period;⁶
- b. copies of the monthly fuel recovery reports currently filed with the Commission, modified to include reports of itemized monthly actual DERP incremental and avoided costs as well as the monthly over/under cumulative balances of DERP avoided and incremental costs;
- c. forecasts of the expected fuel factor to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of prices for uranium, natural gas, coal, oil and other fuel required for

⁶ The Company agrees to break-out Schedule 4 of the monthly fuel recovery reports so that each component (base fuel, environmental, avoided capacity, and DER avoided costs) is reported separately.

generation of electricity. Such forecasts will be provided in the 4th quarter of the calendar year prior to the next annual fuel proceeding and in the 2nd quarter of the calendar year of the Company's next annual fuel proceeding. DEC will use commercially reasonable efforts in making these forecasts. To the extent that the forecast data required hereunder is confidential, any party or customer, other than ORS, that requests forecasted fuel data will have to sign a non-disclosure agreement agreeing to protect the data from public disclosure and to only disclose it to employees or agents with a need to be aware of this information; and,

- d. forecasts of the expected DERP Charge to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of DERP incremental and avoided costs. Forecasts will be provided in the same manner as B.16(c) above.

B.17 The Stipulating Parties agree that DEC's methodology for determining the environmental cost component of the fuel factor and the methodology for allocation and recovery of the capacity-related cost component of the fuel factor (which includes purchased power capacity costs under the Public Utility Regulatory Policies Act of 1978 and natural gas transportation and storage costs) are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865.

B.18 DEC agrees to continue to examine and make adjustments, as necessary, to its natural gas hedging program in light of the potentially reduced volatility in the domestic natural gas market. DEC also agrees to provide monthly natural gas hedging reports to the ORS.

C. REMAINING STIPULATION TERMS AND CONDITIONS

C.1 Further, ORS is charged by law with the duty to represent the public interest of South Carolina pursuant to S.C. Code Ann. § 58-4-10(B). S.C. Code Ann. § 58-4-10(B) reads in part as follows:

‘public interest’ means the concerns of the using and consuming public with respect to public utility services, regardless of the class of customer and preservation of continued investment in and maintenance of utility facilities so as to provide reliable and high quality utility services.

ORS believes these stipulated terms serve the public interest as defined above.

C.2 The Stipulating Parties agree that this Stipulation is reasonable, is in the public interest, and is in accordance with law and regulatory policy. This Stipulation in no way constitutes a waiver or acceptance of the position of any Stipulating Party concerning the requirements of S.C. Code Ann. § 58-27-865, S.C. Code Ann. § 58-40-10, *et seq*, and Commission Order 2015-194 in any future proceeding.

C.3 The Stipulating Parties agree to cooperate in good faith with one another in recommending to the Commission that this Stipulation be accepted and approved by the Commission as a fair, reasonable and full resolution in the above-captioned proceeding. The Stipulating Parties, including their agents, further agree that communications regarding the Stipulation, either between the Stipulating Parties or with non-signatories hereto, shall be supportive of the terms agreed to in this Stipulation.

C.4 This written Stipulation contains the complete agreement of the Stipulating Parties regarding this matter. There are no other terms or conditions to which the Stipulating Parties have stipulated. This Stipulation integrates all discussions among the Stipulating Parties into the terms of this written document. The Stipulating Parties agree that this Stipulation will not constrain, inhibit or impair their arguments or positions held in future proceedings, nor will this Stipulation or any of the matters agreed to in it be used as evidence or precedent in any future proceeding. If

the Commission should decline to approve this Stipulation in its entirety, then any Stipulating Party desiring to do so may withdraw from this Stipulation without penalty.

C.5 This Stipulation shall be interpreted according to South Carolina law.

C.6 Except as expressly set forth herein, this Stipulation in no way constitutes a waiver or acceptance of the position of any Stipulating Party concerning the requirements of S.C. Code Ann. § 58-27-865, S.C. Code Ann. § 58-40-10, *et seq*, and Commission Order No. 2015-194 in any future proceeding. This Stipulation does not establish any precedent with respect to the issues resolved herein, and in no way precludes any Stipulating Party herein from advocating an alternative methodology under S.C. Code Ann. § 58-27-865, S.C. Code Ann. § 58-40-10, *et seq*, and Commission Order No. 2015-194 in any future proceeding.

C.7 This Stipulation shall bind and inure to the benefit of each of the signatories hereto and their representatives, predecessors, successors, assigns, agents, shareholders, officers, directors (in their individual and representative capacities), subsidiaries, affiliates, parent corporations, if any, joint ventures, heirs, executors, administrators, trustees, and attorneys.

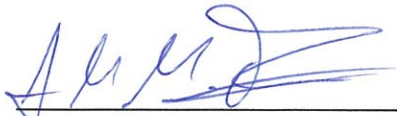
C.8 The Stipulating Parties represent that the terms of this Stipulation are based upon full and accurate information known as of the date this Stipulation is executed. If, after execution, but prior to a Commission decision on the merits of this proceeding, a Stipulating Party is made aware of information that conflicts, nullifies, or is otherwise materially different than that information upon which this Stipulation is based, that Stipulating Party may withdraw from the Stipulation with written notice to every other Stipulating Party.

C.9 The above terms and conditions fully represent the agreement of the Stipulating Parties. Therefore, each Stipulating Party acknowledges its consent and agreement to this Stipulation by authorizing its counsel to affix his or her signature to this document where indicated

below. Counsel's signature represents his or her representation that his or her client has authorized the execution of the agreement. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any Stipulating Party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Stipulation.

[PARTY SIGNATURES TO FOLLOW ON SEPARATE PAGES]

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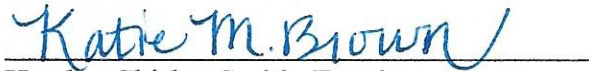
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RIDER RNM (SC)
RENEWABLE NET METERING

AVAILABILITY

Available to residential and nonresidential Customers receiving concurrent service from the Company, on a metered rate schedule, except as indicated under General Provisions. A customer-generator is an owner, operator, or lessee of an electric generation unit that generates or discharges electricity from a renewable energy resource, including an energy storage device configured to receive electrical charge solely from an onsite renewable energy resource. The renewable net energy metered (NEM) generation, which includes a solar photovoltaic; solar thermal; wind powered; hydroelectric; geothermal; tidal or wave energy; recycling resource; hydrogen fueled or combined heat and power derived from renewable resources; or biomass fueled generation source of energy, is installed on the Customer's side of the delivery point, for the Customer's own use, interconnected with and operated in parallel with the Company's system. The generation must be located at a single premise owned, operated, leased or otherwise controlled by the Customer. The system may either be owned by the Customer or by a lessor and leased to the Customer.

Service under this Rider is closed to new participants on and after June 1, 2021. Participants served under this Rider prior to May 16, 2019, and subsequent owners of the customer-generator facility, shall remain eligible for service under this Rider until December 31, 2025, when an alternate tariff must be selected. Participants and subsequent owners of the customer-generator facility applying for service under this Rider on and after May 16, 2019 and prior to June 1, 2021 shall remain eligible for service under this Rider until May 31, 2029, when an alternate tariff must be selected. Customers requesting NEM service on and after June 1, 2021 will receive service in accordance with the NEM tariff in effect at that time.

GENERAL PROVISIONS

1. To qualify for service under this Rider, the Customer must comply with all applicable interconnection standards and must provide, in writing, the Nameplate Capacity of the Customer's installed renewable generation system. Any subsequent change to the Nameplate Capacity must be provided by the Customer to the Company in writing by no later than 60 days following the change.
2. To qualify for service under this Rider, a residential Customer may be served on an approved residential rate schedule, but may not be served under Rider NM. The Nameplate Capacity of Customer's installed generation system and equipment must not exceed 20 kW AC.
3. To qualify for service under this Rider, a nonresidential Customer may be served on an approved general service or industrial rate schedule, but may not be served on Schedules TS, BC, HP, PG, MP or Rider NM. The Nameplate Capacity of Customer's installed renewable generation system and equipment must not exceed the lesser of 1,000 kW AC or 100% of the Customer's contract demand which shall approximate the Customer's maximum expected demand.
4. If the Customer is not the owner of the premises receiving electric service from the Company, the Company shall have the right to require that the owner of the premises give satisfactory written approval of the Customer's request for service under this Rider.
5. All environmental attributes, including but not limited to "renewable energy certificates" (RECs), "renewable energy credits" or "green tags", associated with the generation system shall be conveyed to the Company until billing of a Distributed Energy Resource Program Rider DERP Charge is discontinued on all customer bills. The Customer certifies that the environmental attributes have not, and will not, be remarketed or otherwise resold for any purpose, including another distributed energy resource standard or voluntary purchase of renewable energy certificates in South Carolina or in any other state or country for the Contract Period and any successive contract periods thereto.
6. If the electricity supplied to the Customer by the Company exceeds the electricity delivered to the grid by the customer-generator during a monthly billing period, the customer-generator shall be billed for the net electricity in kilowatt hours (kWh) supplied by the Company plus any demand or other charges under the applicable rate schedule or riders. If the electricity delivered to the grid by the customer-generator exceeds the electricity in kWh supplied by the utility during a monthly billing period, the Customer-Generator shall be credited for the excess kWh generated during that billing period.

Duke Energy Carolinas, LLC

Electricity No. 4
 South Carolina ~~Ninth-Tenth~~ (Proposed) Revised Leaf No. 119
 Superseding South Carolina ~~Eighth-Ninth~~ Revised Leaf No. 119

RIDER RNM (SC)
 RENEWABLE NET METERING

7. Electricity delivered to the grid by the Customer's renewable generation that exceeds the electricity delivered by the Company is defined as Excess Energy. When used in conjunction with a time of use schedule, the TOU periods shall be specified in the applicable schedule and any Excess Energy shall apply first with the Excess Energy generated On-Peak kWh offsetting On-peak usage and then offsetting Off-peak usage. Any excess Off-Peak kWh shall only apply against Off-peak kWh usage. Any Excess Energy not used in the current month to offset usage shall carry forward to the next billing month.
8. Excess Energy shall be used to reduce electricity delivered and billed by the Company during the current or a future month, except that for the March billing period any carry-over shall be compensated as described in the RATE paragraph below.
9. In the event the Company determines that it is necessary to increase the capacity of facilities beyond those required to serve the Customer's electrical requirement or to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, the Customer shall pay the estimated cost of the required transformer or other equipment above the estimated cost which Company would otherwise have normally incurred to serve the Customer's electrical requirement, in advance of receiving service under this Rider.
10. The rates set forth herein are subject to Commission Order No. 2015-194, issued in Docket No. 2014-246-E pursuant to the terms of S.C. Code § 58-40-20(F)(4). Eligibility for this rate will terminate as set forth in that Order, and otherwise as specified above. The value of NEM generation eligible for this Rider shall be computed using the methodology contained in Commission Order No. 2015-194, in Docket No. 2014-246-E, and shall be updated annually by the Company. The value of NEM generation for ~~2019-2020~~ is ~~\$0.053120.02868~~ per kWh for Schedules RS, RE, ES, RB and RT; ~~\$0.053110.02871~~ for Schedule SGS; and ~~\$0.052990.02871~~ for all other schedules.

RATE

All provisions of the applicable schedule and other applicable riders will apply to service supplied under this Rider, except as modified herein. For any bill month during which the Energy Charges are a net credit, the respective Energy Charges for the month shall be zero. Credits shall not offset the Basic Facilities Charge or the Demand Charge (if applicable). In addition to all charges in the applicable rate schedule for the Customer's net electrical usage, the following credit may be applicable annually:

Annual Credit for Excess Generation

If the Customer has Excess Energy after offsetting usage as of the date of the March billing, the Company shall pay the Customer for the amount of the accumulated Excess Energy times a rate of ~~\$0.0432-0.0270~~ per kWh, after which the amount of Excess Energy shall be set to zero.

MINIMUM BILL

The monthly minimum bill for customers receiving service under this Rider shall be no less than Basic Facilities Charge from the applicable rate schedule and riders plus, if applicable, any of the following Charges: the Demand Charge, the Economy Demand Charge, Excess Demand Charge and the Extra Facilities Charge.

METERING REQUIREMENTS

The Company will furnish, install, own and maintain a billing meter to measure the kWh delivered by the Company to the Customer, and to measure the net kWh purchased by the Customer or delivered to the Company. For renewable generation capacity of 20 kW AC or less, the billing meter will be a single, bi-directional meter which records independently the net flow of electricity in each direction through the meter, unless the Customer's overall electrical requirement merits a different meter. For larger renewable generation capacities, the Company may elect to require two meters with 30-minute interval capabilities to separately record the Customer's electrical consumption and the total generator output, which will be electronically netted for billing. The Customer grants the Company the right to install, operate, and monitor special equipment to measure the Customer's generating system output, or any part thereof, and to obtain any other data necessary to determine the operating characteristics and effects of the installation. All metering shall be at a location that is readily accessible by the Company.

South Carolina ~~Ninth-Tenth~~ (Proposed) Revised Leaf No. 119
 Effective for service rendered on and after October 1, ~~2019~~2020
 PSCSC Docket No. ~~2019-2020~~-3-E Order No. ~~2019-6912020-634~~

Duke Energy Carolinas, LLC

Electricity No. 4
South Carolina ~~Ninth-Tenth~~ (Proposed) Revised Leaf No. 119
Superseding South Carolina ~~Eighth~~ ~~Ninth~~ Revised Leaf No. 119

RIDER RNM (SC)
RENEWABLE NET METERING

SAFETY, INTERCONNECTION AND INSPECTION REQUIREMENTS

This Rider is only applicable for installed renewable generation systems and equipment that complies with and meets all safety, performance, interconnection, and reliability standards established by the Commission, the National Electric Code, the National Electrical Safety Code, the Institute of Electrical and electronic Engineers, Underwriter's Laboratories, the Federal Energy Regulatory Commission and any local governing authorities. The Customer must comply with all liability insurance requirements of the Interconnection Standard.

POWER FACTOR

The Customer's renewable generation must be operated to maintain a 100% power factor, unless otherwise specified by Company. When the average monthly power factor of the power supplied by the Customer to the Company is other than 100%, the Company may correct the energy in kWh, as appropriate. The Company reserves the right to install facilities necessary for the measurement of power factor. The Company will not install such equipment, nor make a power factor correction if the renewable generation system is less than 20 kW and uses an inverter.

CONTRACT PERIOD

The Customer shall enter into a contract for service under this Rider for a minimum original term of one (1) year, and the contract shall automatically renew thereafter, except that either party may terminate the contract after one year by giving at least sixty (60) days prior notice of such termination in writing.

The Company reserves the right to terminate the Customer's contract under this Rider at any time upon written notice to the Customer in the event that the Customer violates any of the terms or conditions of this Rider, or operates the renewable generation system and equipment in a manner which is detrimental to the Company or any of its customers. In the event of early termination of a contract under this Rider, the Customer will be required to pay the Company for the costs due to such early termination, in accordance with the Company's South Carolina Service Regulations.